

# Abstract

62 A communications network having two complementary optical networks each connectable to a headend, each optical network comprising a plurality of periodic interleaving filters serially connected by optical waveguides such that an output port of one periodic interleaving filter is coupled to an input port of another periodic interleaving filter, and wherein an input or output node of the network is formed by a non-serially connected input or output port of a periodic interleaving filter.